

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) ~~An apparatus for creating A computerized system configured to create a promotional event calendar, useful in association with at least one store, the apparatus computerized system comprising:~~

~~an econometric engine for modeling sales as a function of price to create a sales model, wherein the econometric engine includes an imputed variable generator for imputing base price variable and for imputing promotional variable, and wherein the sales model includes the imputed base price variable and the imputed promotional variable;~~

a financial model engine for modeling costs to create a cost model;

a promotional engine coupled to the econometric engine, and financial model engine to receive input from the econometric engine and financial model engine, wherein the promotional engine analyzes a plurality of offers, a plurality of promotional events, conditions from at least one manufacturer, and constraints from the at least one store to optimally match offers with promotional events to create a promotional event calendar subject to the conditions from the at least one store, and wherein the constraints from the at least one store includes a linear constraint and a nonlinear constraint.
2. (Previously Amended) The apparatus, as recited in claim 1, wherein the promotional engine further comprises a temporary price reduction optimizing engine for optimizing temporary price reduction prices after the promotional events and offers have been selected.
3. (Original) The apparatus, as recited in claim 2, further comprising a support tool connected to the promotional engine wherein the support tool receives the promotional event

calendar from the promotional engine and provides a user interface to a client, wherein the user interface provides the promotional event calendar to the client.

4. (Original) The apparatus, as recited in claim 1, wherein the promotional engine calculates the value of offers and the value of promotional events by using the financial model and sales model and selects combinations of the offers and the promotional events.

5. (Currently Amended) A computer-implemented method for creating a promotional event calendar, comprising:

creating a sales model and wherein the sales model includes an imputed base price variable and an imputed promotional variable;  
creating a cost model;  
determining conditions from at least one manufacturer;  
determining constraints from at least one store, and wherein the constraints from the at least one store includes a linear constraint and a nonlinear constraint;  
determining the value of offers using the sales model and cost model;  
determining the value of promotional events using the sales model and cost model; and  
selecting combinations of the offers and promotional events based on the determined values to create a promotion event calendar subject to the conditions from the at least one manufacturer and constraints from the at least one store.

6. (Previously Amended) The computer-implemented method, as recited in claim 5, wherein the creating of the sales model comprises:

creating a plurality of demand groups, wherein each demand group is a set of at least one product and wherein at least one of the demand groups is a set of at least two substitutable products, and wherein the creation of the plurality of demand groups includes error detection and correction based on attributes of the plurality of demand groups;

creating a sales model for each demand group; and

creating a market share model for each product in each demand group.

7. (Previously Amended) The computer-implemented method, as recited in claim 6, further comprising the step of estimating net profit from the selected combination of offers and promotional events using the sales model and cost model.

8. (Currently Amended) A computer-implemented method for creating a promotional event calendar, comprising:

creating a sales model, comprising:

creating a plurality of demand groups, wherein each demand group is a set of at least one product and wherein at least one of the demand groups is a set of at least two products;

creating a sales model for each demand group and wherein the sales model for each demand group includes an imputed base price variable and an imputed promotional variable; and

creating a market share model for each product in each demand group;

creating a cost model;

determining conditions from at least one manufacturer;

determining constraints from at least one store, and wherein the constraints from the at least one store includes a linear constraint and a nonlinear constraint;

determining the value of offers using the sales model and cost model;

determining the value of promotional events using the sales model and cost model;

selecting combinations of offers and promotional events based on the determined values to create a promotion event calendar subject to the conditions from the at least one manufacturer and constraints from the at least one store; and

estimating net profit from the selected combination of offers and promotional events using the sales model and cost model.

9. (Previously Amended) The apparatus as recited in claim 1, wherein the constraints from the at least one store include at least one of ad space capacity and display space capacity.

10. (Previously Amended) The apparatus as recited in claim 1, wherein the constraints from the at least one store include at least one of an event type, a number of events, a brand promotion frequency, and a product promotion frequency.
11. (Previously Amended) The computer-implemented method as recited in claim 5, wherein the constraints from the at least one store include at least one of ad space capacity and display space capacity.
12. (Previously Amended) The computer-implemented method as recited in claim 5, wherein the constraints from the at least one store include at least one of an event type, a number of events, a brand promotion frequency, and a product promotion frequency.
13. (Previously Amended) The computer-implemented method as recited in claim 8, wherein the constraints from the at least one store include at least one of ad space capacity and display space capacity.
14. (Previously Amended) The computer-implemented method as recited in claim 8, wherein the constraints from the at least one store include at least one of an event type, a number of events, a brand promotion frequency, and a product promotion frequency.
15. (Previously Added) The apparatus as recited in claim 1, wherein the matching of offers with promotional events includes solving an integer problem using the linear constraint and the nonlinear constraint.
16. (Previously Added) The computer-implemented method as recited in claim 5, wherein the selection of combinations of offers and promotional events includes solving an integer problem using the linear constraint and the nonlinear constraint.

17. (Previously Added) The computer-implemented method as recited in claim 8, wherein the selection of combinations of offers and promotional events includes solving an integer problem using the linear constraint and the nonlinear constraint.
18. (Cancelled)
19. (Previously Added) The apparatus as recited in claim 1, wherein the conditions from the at least one manufacturer include providing at least one of a promotional event and a specific amount of promotion.
20. (Previously Added) The apparatus as recited in claim 1, wherein the conditions from the at least one manufacturer include not providing a promotional event for a competitor's product.
21. (Previously Presented) The computer-implemented method as recited in claim 5, wherein the conditions from the at least one manufacturer include providing at least one of a promotional event and a specific amount of promotion.
22. (Previously Presented) The computer-implemented method as recited in claim 5, wherein the conditions from the at least one manufacturer include not providing a promotional event for a competitor's product.
23. (Previously Presented) The computer-implemented method as recited in claim 8, wherein the conditions from the at least one manufacturer include providing at least one of a promotional event and a specific amount of promotion.
24. (Previously Presented) The computer-implemented method as recited in claim 8, wherein the conditions from the at least one manufacturer include not providing a promotional event for a competitor's product.

25. (New) The apparatus as recited in claim 1, wherein the imputed base price variable is a function of initial base prices.

26. (New) The apparatus as recited in claim 25, wherein the initial base prices are averages of non-promoted prices.

27. (New) The apparatus as recited in claim 1, wherein the sales model created by the econometric engine includes Bayesian Shrinkage modeling.